United States of America

Department of Transportation—federal Aviation Administration

Supplemental Type Certificate

Number SA2477SW 190-

This cortificate, issued to

Fletcher Aviation 8904 Randolph Houston, Texas 77061

cortifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 23 of the Federal Aviation Regulations.

Original Grodust - Type Cortificate Number: A11EA

. Make: Grumman

Model: AA-1, AA-1A, AA-1B, AA-1C

Description of Type Design Change:

Installation of Lycoming 0-320 or 0-290 Engine in accordance with Drawing 77-900, Sheets 1 through 24, Revision H dated February 9, 1979, and E.O. 77-900-02 dated November 4, 1983, or later FAA approved revision. Sheet i of Drawing 77-900 shows the latest revision of each sheet of the drawing.

Limitations and Gonditions:

CATCHERT R. MORELLAND

See Continuation Sheet, pages 2 and 3, a part of this STC.

This certificate and the supporting data which is the basis for approval shall remain in effect until surmendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration

Dale of application: March 17, 1977

Date reissued: March 20, 1989

Tale of issuance: July 13, 1977

Date amended: January 31, 1984 Rev. 8

By direction of the Administrator

For L. B. Andriesen (Signature)

Manager, Rotorcraft Directorate, - Aircraft Certification Service

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

Department of Transportation—Lederal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SAZ477SW

Revision 8

Limitations and Conditions:

- Engine Limits 0-320-E2A, -E2B, -E2C, -E2D, -E2F, -E2G, -E2H;
 0-320-A2A, -A2B, -A2C, -A2D;
 - a. 144 H.P. Takeoff 2510 RPM 108 H.P METO 2280 RPM

Static RPM 2190-2290

b. Tachometer Marking Required

Red line 2510 RPM Yellow arc 2510 - 2280 RPM Green arc 2280 - 1700 RPM

- Engine Limits 0-320-D2A, -D2C, -D2F, -D2G; 0-320-B2A, -B2B, -B2C, -D1A, -D2B, -D3G
 For Models AA-1, AA-1A, AA-1B:
 - a. 144 H.P. Takeoff 2340 RPM 108 H.P. METO 2125 RPM

Static RPM 2100 -22200

b. Tachometer Marking Required

Red line 2340 RPM Yellow arc 2125 - 2340 RPM Green arc 1700 - 2125 RPM

For Model AA-1C: a. 153 H.P. Takeoff

2575 RPM 115 H.P. METO 2340 RPM

Static RPM 2175 - 2275

b. Tachometer Marking Required

Red line 2575 RPM Yellow arc 2340 - 2575 RPM Green arc 1700 - 2340 RPM

Department of Transportation—federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA2477SW

Revision 8

- 3. Engine Limits 0-290-D2
 - a. 140 H.P. Takeoff 2800 RPM 108 H.P.METO 2570 RPM

Static RPM 2350 - 2450

b. Tachometer Marking Required

Red line 2800 RPM Yellow arc 2570 - 2800 RPM Green arc 1500 - 2570

- 4. V 185 MPH
- 5. For AA-1, AA-1A, AA-1B Airspeed Indicator must have Red line at 185 MPH. Yellow arc above 185 MPH must be removed along with original ASI Red line
- 6. For AA-IC Airspeed indicator must also have the following markings:

Red line at 185 MPH Green arc from 69 to 185 MPH White arc from 64 to 115 MPH

- 7. Child's Seat modification eligible with this STC only if shown satisfactory for weight and balance limitations.
- 8. For 0-320 Series engines Sensenich 74DM6, 74DM7, or McCauley 1A170GM propellers are eligible.
- 9. For 0-290 Series engines Sensenich M74DM propeller is eligible.
- Compatibility of this modification with other previously approved modifications must be determined by the installer.

INSTRUCTIONS: The transfer endorsement below may be used to notify the appropriate FAA Regional Office of the transfer of the Supplemental Type Certificate.

The FAA will reissue the certificate in the name of the transferee and forward it to him.

TRANSFER ENDORSEMENT

Transfer the ownership of	of Supplemental Type Certificate Number
co (Name of transferee)	
(Address of transferee)	(Number and street)
	(Number and street)
	(City, State, and ZIP code)
from (Name of grantor) (F	Print or type)
(Address of grantor)	(Number & street)
	(Number & street)
	(City, State, and ZIP code)
extent of Authority (if	licensing agreement):
Date of Transfer:	